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- (71) Applicant (for all designated States except US): SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH [US/US]; 1275 York Avenue, New York, NY 10021 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHIOSIS, Gabriela [RO/US]; c/o Office of Industrial Affairs, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021 (US). ROSEN, Neal [US/US]; c/o Office of Industrial Affairs, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021 (US). HUEZO, Henri [US/US]; c/o Office of Industrial Affairs, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021 (US).
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(54) Title: ASSAY FOR IDENTIFICATION OF BIOACTIVE COMPOUNDS THAT INTERACT WITH HEAT SHOCK PROTEIN 90

(57) Abstract: A method for evaluation of molecules to identify those that can act as therapeutic inhibitors of Hsp90 makes use of a fluorescence polarization (FP) assay and a cell based assay, either individually or in combination. The FP assay uses a fluorescently-labeled Hsp90 binding agent and measure the degree of fluorescence polarization relative to the standard. A decrease in the degree of polarization indicates that fluorescently-labeled Hsp90 binding agent has been wholly or partially displaced by a candidate molecule, and identifies the molecule as having activity as an inhibitor of Hsp90. The cell based assay tests for decrease in an Hsp90-dependent activity of normal or tumor cells.



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